

5852 93119 **SEARCH REQUEST FORM** Scientific and Technical Information Center - EIC2800

Rev. 8/27/01 This is an experimental format -- Please give suggestions or comments to Jeff Harrison, CP4-9C18, 306-5429.

Date 5/3/03 Serial # 16/086,117 Priority Application Date 12/24/01
 Your Name M. Lewis Examiner # _____
 AU 2822 Phone 305-3943 Room Plaza 3-3809
 In what format would you like your results? Paper is the default. ☒ PAPER ☐ DISK ☐ EMAIL

If submitting more than one search, please prioritize in order of need.

The EIC searcher normally will contact you before beginning a prior art search. If you would like to sit with a searcher for an interactive search, please notify one of the searchers.

05-05-03 A09:27 IN

Where have you searched so far on this case?

Circle: ☒ USPT ☐ DWPI ☐ EPO Abs ☐ JPO Abs ☐ IBM TDB

Other: _____

What relevant art have you found so far? Please attach pertinent citations or Information Disclosure Statements. _____

What types of references would you like? Please checkmark:

Primary Refs ☒ Nonpatent Literature ☐ Other ☐
 Secondary Refs ☒ Foreign Patents ☐
 Teaching Refs ☐

What is the topic, such as the **novelty**, motivation, utility, or other specific facets defining the desired **focus** of this search? Please include the concepts, synonyms, keywords, acronyms, registry numbers, definitions, structures, strategies, and anything else that helps to describe the topic. Please attach a copy of the abstract and pertinent claims.

Claims 1-12

Problem Pages 1-4
Solution Sec 11 5

Staff Use Only

Searcher: Derek Black

Searcher Phone: _____

Searcher Location: STIC-EIC2800, CP4-9C18

Date Searcher Picked Up: 5/6/03

Date Completed: 5/9/03

Searcher Prep/Rev Time: _____

Type of Search

Structure (#) _____

Bibliographic ☒

Litigation _____

Fulltext _____

Patent Family _____

Other _____

Vendors

STN ☒

Dialog ☒

Questel/Orbit _____

Lexis-Nexis _____

WWW/Internet _____

Other _____

FILE 'REGISTRY'

L1 273 S ISOPROPYL ALCOHOL
 L2 1 S ISOPROPYL ALCOHOL/CN
 L3 1 S METHANOL/CN
 L4 1 S GLYCOL/CN
 L5 0 S METHY PYRROLIDONE
 L6 21 S METHYL PYRROLIDONE
 L7 1 S TIN/CN
 L8 1 S INDIUM/CN
 L9 0 S SNPN/CN
 L10 0 S SNPB/CN
 L11 0 S PBSN/CN
 L12 1 S TIN LEAD
 L13 1687872 S IC OR ICS OR ((INTEGRATED OR LOGIC)(W)(CIRC
 UIT?)) OR (MICRO)(W)(ELETRONIC? OR CIRCUIT? OR CHIP?) OR CHIP
 OR MICROCIRCUIT OR DIE OR LOGIC(W)CIRCUIT? OR WAFER OR
 MICROELECTRONIC OR DICE
 L14 474 S (COPPER OR CU)(2A)(METAL? OR STUD OR PAD)
 L15 6 S (COPPER OR CU)(2A)(LAYER? OR FILM? OR
 COAT?)

FILE 'HCAPLUS'

L16 250703 S IC OR ICS OR ((INTEGRATED OR LOGIC)(W)(CIRC
 UIT?)) OR (MICRO)(W)(ELETRONIC? OR CIRCUIT? OR CHIP?) OR CHIP
 OR MICROCIRCUIT OR DIE OR LOGIC(W)CIRCUIT? OR WAFER OR
 MICROELECTRONIC OR DICE
 L17 51091 S (COPPER OR CU)(2A)(METAL? OR STUD OR PAD)
 L18 64340 S (COPPER OR CU)(2A)(LAYER? OR FILM? OR
 COAT?)
 L19 177688 S ELECTRICAL?(W)CONDUCT?
 L20 386 S INTERMEDIATE(W)BARRIER OR (UNDER)(W)(BUMP
 OR PAD) OR UNDERPAD OR UNDERBUMP
 L21 168013 S POLYMERIC
 L22 54693 S POLYIMIDE
 L23 1334 S BENZOCYCLOBUTENE
 L24 1561 S POLYBENZOXAZOLE
 L25 704267 S TIN OR PB OR SN OR INDIUM OR (TIN OR
 SN)(W)(LEAD OR PB OR INDIUM OR SILVER OR AG OR BISMUTH OR
 BI)
 L26 8077 S ASHING
 L27 461016 S ISOPROPYL(W)ALCOHOL OR METHANOL OR GLYCOL
 OR METHY(W)PYRROLIDONE
 L28 461045 S ISOPROPYL(W)ALCOHOL OR METHANOL OR GLYCOL
 OR METHYPYRROLIDONE
 L29 171351 S ETCH###
 L30 70795 S (SI OR SILICON)(W)(NITRIDE OR N)

L31 8830 S (SILICON OR SI)(W)(OXYNITRIDE OR MONONITRID
 E) OR SION OR SILICON(W)NITRIDE(W)OXIDE
 L32 0 S (BOJKOV, C OR BOJKOV C OR BOJKOV, CHRISTO
 OR BOJKOV CHRISTO)/AU
 L33 1 S (BOJKOV, C P OR BOJKOV C P OR BOJKOV,
 CHRISTO P OR BOJKOV CHRISTO P)/AU
 L34 1 S (COFFMAN, PHILLIP OR COFFMAN PHILLIP OR
 COFFMAN P OR COFFMAN, P)/AU
 L35 446 S (SMITH, P OR SMITH P OR SMITH, PATRICIA OR
 SMITH PATRICIA)/AU
 L36 4670 S L16 AND ((L17 OR L18))
 L37 86 S L36 AND ELECTRICAL(W)RESISTANCE
 L38 0 S L37 AND WINDOW
 L39 1 S L37 AND L20
 L40 61 S L36 AND L20

FILE 'REGISTRY'

L41 0 S SIN/MF
 L42 6 S NSI/MF
 L43 0 S (SI AND O AND NITRIDE)/ELS AND ELC.SUB
 L44 0 S (SI AND O AND NITRIDE)/ELS AND 3/ELC.SUB
 L45 358 S (SI AND O AND N)/ELS AND 3/ELC.SUB

FILE 'HCAPLUS'

L46 66 S L36 AND (L45 OR L31)
 L47 59 S L46 AND (L30 OR L42)
 L48 0 S L47 AND ELECTRICAL(W)RESISTANCE
 L49 23069 S THERMOMECHANICAL OR THERMO(W)MECHANICAL
 L50 0 S L49 AND L47
 L51 59 S L47 AND L47
 L52 0 S L46 AND L49
 L53 13 S L37 AND L19
 L54 0 S L40 AND L19
 L55 7 S L46 AND L19
 L56 7 S L47 AND L19
 L57 20 S (L53 OR L54 OR L55 OR L56)

FILE 'REGISTRY'

L58 275 S POLYMERIC
 L59 353 S POLYIMIDE
 L60 0 S BENZOCYCLOBUTENE
 L61 155 S BENZOCYCLOBUTENE
 L62 1 S BENZOCYCLOBUTENE/CN

FILE 'REGISTRY'

L63 0 S POLYBENZOXAZOLE/CN

L64 8 S POLYBENZOXAZOLE
L65 0 S L36 AND ((L58 OR L59 OR L60 OR L61 OR L62)
OR L64 OR (L21 OR L22 OR L23 OR L24))

FILE 'HCAPLUS'

L66 376 S L36 AND ((L58 OR L59 OR L60 OR L61 OR L62)
OR L64 OR (L21 OR L22 OR L23 OR L24))
L67 51 S L66 AND ELECTRICAL?(2A)CONDUCT?
L68 46 S L67 NOT L57
L69 1894 S L16 AND L17
L70 415 S L69 AND L25
L71 3683 S (SOLDER?)(W)(BALL OR BUMP OR POST OR
SPHERE?) OR BGA OR BALLGRID OR BALL(W)GRID OR
POLYMER(W)BALL

L72 47 S L70 AND L71
L73 92 S L70 AND ((L7 OR L8 OR L9 OR L10 OR L11 OR
L12))
L74 16 S L73 AND L71
L75 47 S (L74 OR L72) NOT L57
L76 5324 S L16 AND (L27 OR L28 OR (L1 OR L2 OR L3 OR
L4 OR L5 OR L6))
L77 0 S L76 AND DRY(W)CHEMICAL(W)VAPOR
L78 0 S L76 AND ULTRASONIC(W)ENERGY
L79 15 S L76 AND OXYGEN(W)PLASMA
L80 12 S L76 AND O(W)PLASMA
L81 1 S L76 AND (HYDROGEN OR H)(W)PLASMA
L82 435 S L76 AND L29
L83 39 S L82 AND (SPUTTER? OR PVD OR PHYSICAL(W)VAPO
R(W)DEPOSITION)
L84 39 S L83 NOT (L74 OR L72 OR L57)
L85 106 S L83 OR L74 OR L72 OR L57

SEL PN
L86 56 S (EP930642/PN OR EP978870/PN OR WO2002052642
/PN OR CA2051604/PN OR DE10050049/PN OR DE2601765/PN OR
EP1058944/PN OR EP1207546/PN OR EP533575/PN OR EP678903/PN OR
FR2815359/PN OR GB1476599/PN OR JP02224233/PN OR JP05109673/PN
OR JP05195287/PN OR JP05217966/PN OR "JP06036416 B4"/PN OR
JP06112213/PN OR JP06204186/PN OR JP06295898/PN OR JP07263361/P
N OR JP07297175/PN OR JP07302786/PN OR JP07321097/PN OR
JP07331445/PN OR JP08124920/PN OR JP09237821/PN OR JP11298046/P
N OR JP2000114246/PN OR JP2000188286/PN OR JP2001093928/PN OR
JP2002141348/PN OR JP2002164437/PN OR JP2002278090/PN OR
JP2002505504/PN OR JP2003115535/PN OR "JP2528962 B2"/PN OR
"JP2979284 B2"/PN OR "JP3004165 B2"/PN OR "JP3062393 B2"/PN OR
"JP3098203 B2"/PN OR "JP3162245 B2"/PN OR "JP3208008 B2"/PN OR
"JP3256707 B2"/PN OR "JP3328625 B2"/PN OR JP51086043/PN OR

"JP55035238 B4"/PN OR JP60102750/PN OR JP64000285/PN OR
KR2000017156/PN OR TW387096/PN OR TW393591/PN OR TW432118/PN
OR TW468245/PN OR US2001013504/PN OR US2001023744/PN OR
US2001027843/PN OR US2001044197/PN OR US2002011674/PN OR
US2002013063/PN OR US2002023720/PN OR US2002048969/PN OR
US2002081834/PN OR US2002088547/PN OR US2002094694/PN OR
US2002127565/PN OR US2002136967/PN OR US2002139476/PN OR
US2002155723/PN OR US2002196996/PN OR US2003017580/PN OR
US2003017581/PN OR US2003022477/PN OR US2003026891/PN OR
US2003027328/PN OR US2003032039/PN OR US2003032274/PN OR
US2003059855/PN OR US2003060048/PN OR US2003067079/PN OR
US2003068657/PN OR US2003077660/PN OR US3809625/PN OR

US4097266

/PN OR US4224085/PN OR US5007981/PN OR US5200017/PN OR
US5320707/PN OR US5320709/PN OR US5423974/PN OR US5468686/PN
OR US5578163/PN OR US5597110/PN OR US5747381/PN OR

US5853960/PN

OR US5866481/PN OR US5868854/PN OR US5888309/PN OR

US5900103/P

N OR US5904560/PN OR US5972793/PN OR US6033996/PN OR

US6080636/

PN OR US6106737/PN OR US6194326/PN OR US62

L87 448 S (L33 OR L34 OR L35)

L88 9 S L87 AND L16

FILE 'WPIX, JAPIO'

L89 72 S L86

L90 910812 S IC OR ICS OR ((INTEGRATED OR LOGIC)(W)(CIRC
UIT)) OR (MICRO)(W)(ELECTRONIC? OR CIRCUIT OR CHIP) OR CHIP

OR

MICROCIRCUIT OR DIE OR LOGIC(W) CIRCUIT? OR WAFER OR

MICROELECT

RONIC OR DICE

L91 24041 S (COPPER OR CU)(2N)(METAL? OR STUD OR PAD)

L92 35349 S (COPPER OR CU)(2N)(LAYER? OR FILM? OR
COAT?)

L93 101449 S ELECTRICAL?(W) CONDUCT?

L94 73733 S POLYMERIC

L95 46720 S POLYIMIDE

L96 473 S BENZOCYCLOBUTENE

L97 650 S POLYBENZOXAZOLE

L98 175913 S TIN OR PB OR SN OR INDIUM OR (TIN OR
SN)(W)(LEAD OR PB OR INDIUM OR SILVER OR AG OR BISMUTH OR

BI)

L99 187701 S ISOPROPYL(W) ALCOHOL OR METHANOL OR GLYCOL

OR METHY(W) PYRROLIDONE
 L100 40024 S (SI OR SILICON)(W)(NITRIDE OR N)
 L101 4497 S (SILICON OR SI)(W)(OXYNITRIDE OR MONONITRID
 E) OR SION OR SILICON(W) NITRIDE(W) OXIDE
 L102 2 S (BOJKOV, C OR BOJKOV C OR BOJKOV, CHRISTO
 OR BOJKOV CHRISTO)/AU
 L103 0 S (COFFMAN, PHILLIP OR COFFMAN PHILLIP OR
 COFFMAN P OR COFFMAN, P)/AU
 L104 216 S (SMITH, P OR SMITH P OR SMITH, PATRICIA OR
 SMITH PATRICIA)/AU
 L105 9110 S L90 AND ((L94 OR L95 OR L96 OR L97))
 L106 64 S L105 AND (OXYGEN OR O)(W)(PLASMA)
 L107 0 S L106 AND (HYDROGEN OR H)(W)(PLASMA)
 L108 3 S L105 AND (HYDROGEN OR H)(W)(PLASMA)
 L109 71181 S (SPUTTER? OR PVD OR PHYSICAL(W) VAPOR(W)
 DEPOSITION)
 L110 7 S L106 AND L109
 L111 3815 S L90 AND L99
 L112 14 S L111 AND (OXYGEN OR O)(W)(PLASMA)
 L113 1 S L111 AND (HYDROGEN OR H)(W)(PLASMA)
 L114 12 S ((L102 OR L103 OR L104)) AND L90
 L115 25 S L108 OR L110 OR L112 OR L113
 L116 12 S L114 NOT L115